

# INTERNATIONAL SEARCH REPORT

PCT/EP2005/002075

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H01Q1/24 H01Q1/48 H01Q1/52

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H01Q H04B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y P,X	WO 02/084784 A (NEC CORPORATION; HANKUI, EIJI; KURIYAMA, TOSHIHIDE) 24 October 2002 (2002-10-24) the whole document -& EP 1 403 960 A (NEC CORPORATION) 31 March 2004 (2004-03-31)  the whole document	1-15, 19-26, 28,29 16-18,27 1-15, 19-26, 28,29
X	US 6 314 273 B1 (MATSUDA TERUKAZU) 6 November 2001 (2001-11-06) the whole document	1-15, 19-26,29
X	US 6 421 016 B1 (PHILLIPS JAMES P ET AL) 16 July 2002 (2002-07-16)  the whole document	1-4,6-8, 11, 24-26,29
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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

### \* Special categories of cited documents :

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- \*O\* document referring to an oral disclosure, use, exhibition or other means
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- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the international search

7 June 2005

Date of mailing of the international search report

14/06/2005

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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Y	WO 03/023900 A (FRACTUS, S.A; QUINTERO ILLERA, RAMIRO; PUENTE BALIARDA, CARLES) 20 March 2003 (2003-03-20) cited in the application the whole document	27
Y	WO 2004/001894 A (FRACTUS, S.A; GALA GALA, DAVID; PUENTE BALIARDA, CARLES; SOLER CASTANY) 31 December 2003 (2003-12-31) the whole document	16-18

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